

another temperature. Likewise, the solvent identified in the specification is toluene. Accordingly, no lack of clarity exists. Furthermore, Applicants submit that in the high impact polystyrene (HIPS) industry, it is conventional practice to measure the solution viscosity of impact modifying rubbers in styrene at a concentration of 5%. To maintain stoichiometric correspondence, the solution viscosity of the rubbers of the present invention are measured at a concentration of 5.43% in toluene. Thus, Applicants submit that the solution viscosity values are not indefinite and that they sufficiently claim the subject matter of the invention.

Likewise, the bulk (Mooney) viscosity measurements are  $M_L^{1+4}$  (100°C) measurements. Applicants submit that these are standard conditions used throughout the industry and one skilled in the art would recognize these values as being recorded under these conditions absent an indication to the contrary.

The Examiner rejected claims 1-7 and 9-10 under 35 U.S.C. §103(a) as being unpatentable over Hudson. Applicants respectfully traverse.

Hudson discloses a solid propellant composition comprising an inorganic oxidizing salt and an uncured polymer containing at least one acid group. Hudson teaches that the uncured polymer may be a conjugated diene, such as butadiene, and contain an optional vinyl-substituted aromatic compound, such as styrene, anionically polymerized in the presence of an organolithium initiator. The polymers are terminated by treating with suitable reagents such as carbon dioxide, sulfonyl chloride, and the like and then hydrolyzing the reactive groups of the resultant polymer to provide polymers containing terminal acidic groups (col. 4, lines 50-58).

Despite the Examiner's arguments that Hudson teaches a carboxylate terminated polymer, Hudson clearly teaches an acid terminated polymer. That is, although Hudson discloses that the polymer may be reacted with carbon dioxide, the resultant  $\text{CO}_2^-$  group is then neutralized by immediately protonating the polymer to provide a  $\text{COOH}$  terminal acid group (col. 4, line 57). Thus, Hudson does not teach a carboxylate ( $\text{CO}_2^-$ ) terminated polymer as claimed in the present invention, but rather an acid terminated polymer.

Further, there is no indication that the polymer disclosed in Hudson is a baleable polymer, only the Examiner's unsupported contention. In addition, there is no indication that the polymer would have the solution and bulk viscosities necessary to enable the material to be baled into a shippable and easy to handle form. As seen in Table I of the present application, the claimed process in which the conjugated diene polymer is CO<sub>2</sub> terminated results in a significant increase in Mooney (bulk) viscosity over similar non-CO<sub>2</sub> terminated polymers. Thus, despite the Examiner's argument, a skilled artisan would not have expected Hudson's polymers to inherently have the claimed solution and bulk viscosities, particularly when the Hudson polymer is not CO<sub>2</sub> terminated. For at least these reasons, Applicants submit that Hudson fails to render the present claims unpatentable under §103.

### **CONCLUSION**

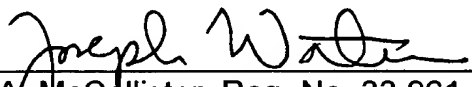
Applicants respectfully request reconsideration of the application in light of the above amendments and comments. Applicants submit that all claims are patentable over the art of record. If there are any issues remaining, the Examiner is encouraged to contact the undersigned in an attempt to resolve any such issues.

If any fee is due in conjunction with the filing of this Response, Applicants authorize deduction of that fee from Deposit Account 06-0308.

Respectfully submitted,

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Date: June 3, 2003

  
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